

AMENDMENTS TO THE CLAIMS

Claims 1-4 (Canceled).

5. **(Currently Amended)** A joint socket for a hip endoprosthesis, comprising:

a socket shell configured to be implanted in the pelvic bone of a patient, the socket shell having an inner surface that defines an accommodating space extending about an axis of rotation; and

a socket insert configured to provide a bearing for a joint head of a prosthesis stem, a spherical outer surface of said socket insert configured to be disposed in the accommodating space of the socket shell and contact the inner surface of the socket shell along a line of contact that is concentric with the axis of rotation of the accommodating space of the socket shell, the line of contact being [[and is]] surrounded by and intersecting[[s]] the spherical outer surface of the socket insert, the socket insert coupleable in a self-locking manner within said accommodating space along said line of contact,

wherein the inner surface of the socket shell tapers toward a pole of the shell in [[the]] a region on either side of said line of contact in such a manner that a radius of curvature of the taper of the inner surface of the socket shell in the region of said line of contact is greater than the spherical radius of the outer surface of said socket insert at said line of contact when the shell and insert are in contact with each other.

6. (Previously Presented) The joint socket of Claim 5, wherein the inner surface has a conical shape and defines an infinite radius of curvature in the region of said line of contact.

7. (Previously Presented) The joint socket of Claim 6, wherein a cone angle of said conically shaped inner surface is a self-locking angle corresponding to a material pairing of said socket shell and said socket insert.

8. (Previously Presented) The joint socket of Claim 7, wherein the cone angle of said conical inner surface is between about 4° and 10°.

9. (Previously Presented) The joint socket of Claim 7, wherein the cone angle of said conical inner surface is about 4.5°.

10. (Previously Presented) The joint socket of Claim 7, wherein the cone angle of said conical inner surface is about 9.5°.

11. (Withdrawn) A method for implanting a joint socket for a hip endoprosthesis, comprising:

inserting a socket shell in a pelvic bone, the socket shell having a conical inner surface that defines an accommodating space extending about an axis of rotation;

loosely inserting a socket insert into the accommodating space so that an outer surface of the socket insert comes into contact with the conical inner surface;

rotating the socket insert within the accommodating space to a desired position;

tilting the socket insert within the accommodating space to a desired position; and

pressing the socket insert into the accommodating space to engage the socket insert with the socket shell in a self-locking manner.

12. **(Currently Amended)** The joint socket of Claim 5, wherein the joint socket and the joint insert are configured to allow free rotation and tilting of the insert in the socket shell **when the insert and shell are in contact with each other along said line of contact**.

13. (Previously Presented) The joint socket of Claim 5, wherein at least a portion of an outer surface of the socket shell comprises a threaded portion.

14. (Previously Presented) The joint socket of Claim 5, wherein the socket shell is configured to be fixed in bone by one or more screws.

15. (Previously Presented) The joint socket of Claim 5, wherein the accommodating space comprises a generally flat base.

16. (Previously Presented) The joint socket of Claim 5, wherein the socket insert is a metallic socket insert.

17. (Previously Presented) The joint socket of Claim 5, wherein the socket insert is a ceramic socket insert.

18. (Previously Presented) The joint socket of Claim 5, wherein the line of contact is spaced between about 5mm and 15mm from an opening of the accommodating space.

19. **(Currently Amended)** A joint socket for a hip endoprosthesis, comprising:

a socket shell configured for implantation in a pelvic bone, the socket shell having an inner surface that defines an accommodating space extending about an axis of rotation; and

a socket insert comprising a bearing surface configured to receive a joint head of a prosthesis stem, the socket insert comprising a spherical outer surface configured for insertion in the accommodating space of the socket shell and configured to contact the inner surface of the socket shell along a line of contact that is concentric with the axis of rotation of the accommodating space, the socket insert coupleable in a self-locking manner within said accommodating space,

wherein the inner surface of the socket shell tapers toward a pole of the shell in a ~~[[the axial]]~~ region on either side of said line of contact in such a manner that a radius of curvature in the region is greater than the spherical radius of the outer surface of said socket insert.

20. (Previously Presented) The joint socket of Claim 19, wherein the line of contact intersects the spherical outer surface.

21. (Previously Presented) The joint socket of Claim 19, wherein the inner surface has a conical shape and defines an infinite radius of curvature in the region axially surrounding said line of contact.

22. (Previously Presented) The joint socket of Claim 21, wherein a cone angle of said conically shaped inner surface is a self-locking angle corresponding to a material pairing of said socket shell and said socket insert.

23. (Previously Presented) The joint socket of Claim 22, wherein the cone angle of said conical inner surface is between about 4° and 10°.

24. (Previously Presented) The joint socket of Claim 23, wherein the cone angle of said conical inner surface is about 4.5°.

25. (Previously Presented) The joint socket of Claim 23, wherein the cone angle of said conical inner surface is about 9.5°.

26. **(New)** The joint socket of Claim 5, wherein said socket insert contacts said socket shell solely along said concentric line of contact.

27. **(New)** The joint socket of Claim 19, wherein said socket insert contacts said socket shell solely along said concentric line of contact.

28. **(New)** The joint socket of Claim 5, wherein the socket insert is monolithic.

29. **(New)** The joint socket of Claim 19, wherein the socket insert is monolithic.

30. **(New)** A joint socket for a hip endoprosthesis, comprising:

a socket shell having an inner surface that defines an accommodating space extending about an axis of rotation, at least a portion of the accommodating space is in the form of a straight circular cone, the straight circular cone having a cone angle between about 4 degrees and 10 degrees; and

a socket insert having an outer surface, the outer surface is spherically shaped at least in a region in which the outer surface of the socket insert comes into contact with the inner surface of the straight circular cone when in use.

31. **(New)** The joint socket of Claim 30, wherein the socket shell and socket insert are coupleable in a self-locking manner along a contact between the spherically shaped region and the circular cone portion.

32. **(New)** The joint socket of Claim 30, wherein the socket shell and socket insert only contact between the spherically shaped region and the circular cone portion.

33. **(New)** The joint socket of Claim 30, wherein the socket insert is monolithic.

34. **(New)** A joint socket for a hip endoprosthesis, comprising:

a socket shell having an inner surface comprising a tapered portion that extends about an axis of rotation and comprises a taper, the tapered portion at least partially defining an accommodating space configured to receive a socket insert;

a socket insert having an outer surface, the outer surface comprising a spherically shaped region having a radius of curvature, the socket insert being configured to contact the socket shell on the tapered portion along a line of contact concentric with the axis of rotation of the tapered portion when the socket insert is inserted into the accommodating space of the socket shell;

wherein a radius of curvature of the taper of the tapered portion surrounding the line of contact is greater than the radius of curvature of the spherically shaped region of the socket insert.

35. **(New)** The joint socket of Claim 34, wherein the tapered portion is conical.